Citations and References: Guidelines on Literature Practices

Elena Tikhonova[1, 2] ⬤**, Lilia Raitskaya**[3] ⬤

[1] National Research University Higher School of Economics, Moscow, Russia

[2] Peoples' Friendship University of Russia (RUDN University), Moscow, Russia

[3] Moscow State Institute of International Relations (MGIMO University), Moscow, Russia

Abstract

Introduction. Citations of scholarly publications are considered an efficient measure of productivity of research and researchers. They are part of scholarly communication, driving the evolving knowledge in all disciplines. Citations form an integral part of literature practices of researchers. The latter are prone to deliberate or unconscious biases. One of the challenges all researchers face is to overcome or at least mitigate identified biases in citation. It may lead to distorting knowledge development in the least possible way.

Purpose. As the research of citations is on the rise, more theoretical background is being developed. The editors call the JLE readers attention to the Triangular Citations, with various relationships among publications formed by citations.

Results. Empirical studies are not unanimous in defining the features that affect citations most. Most researchers highlight a publication source as the most influential feature, with multi feature approach favoured by the academic community at large. Other features entail features relating to authors, journal, and publication itself. Moreover, there are varieties across the disciplines. The field of research of citation behaviour is only beginning to widen. The focus of such research is made on citation behaviour patterns, individual incentives behind the references and citations aligned with financial or reputation stimuli, and citations patterns linked to citation behaviour. Bias in citation threatens to distort knowledge and may evolve it subtly or obviously in a specific direction. Biases are not easy to deal with. In addition, values and mindsets vary across the countries and academic and scholarly communities that hinders efforts to overcome biases.

Implications. The JLE editors sum up the best guidelines on improvements in publications that add to greater citations, with the high quality of articles as the key.

KEYWORDS:

citation, citation behaviour, citation bias, citation recommendation, literature practice, citation network, triangular citation, citation stacking, citation boosting.

INTRODUCTION

Scholarly publishing is inseparable from citation issues. The latter are getting more influence and weight for universities in respect of university rankings (Waltman et al., 2012); for scholars and academics at large as citations and H-index affect their academic standings and contracts of employment; and for scholarly journals as a key indicator of their prominence within their scopes. Assessments of research and researchers in the academia rank citations high on the list (Olszewski, 2020). Citation content of research papers is "an important representation of communication among different disciplines" in social sciences and humanities that are inevitably multi-disciplinary fields (Zhang, Liu, & Wang, 2021).

A competitive edge in science adds much to new jobs and economic growth. Science bringing innovations into the economy acts as a production factor. Thus, funding research came to the fore some twenty plus years ago in most economies. It is essential for funders to be sure that their investments would pay off (Bu et al., 2021). Being nearly uniform so far, global trends "publish or perish" embody policies of the countries seeking innovations and cutting-edge research. Formally, such research publications are often highly cited.

Citations of the published research results have become the major and most reliable measure of research impact and consequently their value. As peer-reviewed journals are the prevailing form of scholarly communication where new research results are published after peer review, they get accessible for the global scholarly communication there. But so far approximately 90 percent of the studies published globally are never cited (Meho, 2007). Even articles that are read, downloaded, or publicly mentioned in the social media remain not mentioned by the scholarly community. To make their publications citable, authors ought to know what and why is cited.

As science is supposed to be communal in nature, no research is conducted on its own as a stand-alone study. All new research publications are based on research of other scholars. The previously published and cited, i.e. acknowledged, research papers lay the foundation for new research. Science funders are eager to have the publications they financially support brought out in highly reputed journals and consequently cited. It became the objective behind the "publish or perish" policies.

In their studies, researchers spend much time on literature practices. The latter ranges from searches for scholarly information of different kinds to analyses and citation of articles and monographs on the topic of interest. Literature practices "consists of the selection, reading and citing of sources" (Klitzing, Hoekstra, & Strijbos, 2019).

Many biases in citations stem from inefficient, prejudiced, or wrong literature practices. Citation behaviour patterns such as self-citation boosting and citation stacking also may distort the ways of citing a source (de Lusignan & Moen, 2016).

Citations and refences gave birth to a field covering various notions and terms (see the box below). For successful authors, it is challenging to realize what their papers should be to be both socially optimal and highly citable. The field is supplying them with some clues and recommendations.

The main part of this editorial entails an analysis of publication features driving citation growth, prevailing citation behaviour patterns and motivations lying behind; missteps and bias in literature practices; and a theoretical basis of citation networks. Finally, we outline essential guidelines for JLE authors on avoiding bias in citations and their complete-

ness, using the best literature practices and key characteristics of the existing citation recommendation systems.

Publication Features Affecting Citations

Researchers of citation single out various sets of features driving citation growth. All researchers are unanimous in multi-feature approach. The major factors entail inherent quality of a scholarly publication; features relating to authors, including the number of authors, their academic reputation, and nationality or affiliation; the impact of the journals where an article is published (journal centrality and SCImago quartile, impact factor, language, etc.); paper features (document type, topic, its rank, title, number and prestige/ reliability of references; novelty, etc.) (Bai, Zhang, & Lee, 2019). This list is too general and may be thoroughly extended.

In some studies, authors outline measurable citations, with a publication source as the most important factor contributing to citations (Ha, 2022). Only measurable variables were included in the model in the research by T. Ha (2022). They were analysed to estimate the ways they affect the number of citations. The variables entail the publication year, number of authors of the paper, number of author affiliations, number of author countries, number of pages, number of words in the title, number of words in the abstract, number of author keywords, number of references, number of All Science Journal Classification (ASJC) codes, publication source, form of open access, publication type, and language (Ha, 2022).

Recurrent authors tend to provide for special features in their publications in pursuit of citations. Our personal experience involves novelty in the mainstream topics (via a unique approach or novel aspects of a popular topic); types of papers (reviews are generally cited more often as compared with other types); the reputation of a journal; and ingenious methods or design of research. There is a reservation for any set of prevailing features. It is the subject field of research. The features specific of a particular discipline may be rather distinctive and differ a lot from the stereotyped characteristics across other disciplines (Vanday, 2009).

Citation Behaviour Patterns

Citation behaviour describes the ways an author selects references and disseminate knowledge. It is thoroughly in-

• citation	• citer	• citation stacking
• quotation	• citation pattern	• citation boosting
• quote	• self-citation	• bibliographic coupling
• refence	• citation network	• citation frequency
• paraphrasing	• co-citation	• citation index
• literature practice	• direct citation	• h-index
• triangular citation	• in-text citation	• citation-seeking behaviour
• topic prominence	• accuracy of citation	• citation-driven research
• citation recommendation system	• redundancy citations	• notification of new citations
• replication crisis	• secondary citation	• shortcut
	• impact factor	• refence linking, etc.

vestigated in two approaches: authors and citation contexts (Yang, & Liu, 2022). Relationships among research papers are constructed, with citation networks and citation cascades prevailing elsewhere.

Citation behaviour is supposed to be the source driver of scientific dynamics (Yang, & Liu, 2022). On the whole, authors may choose to follow one or several behaviour patterns in citing scholarly literature. Citation behaviour is defined as "the author's selection of references based on the motivation of knowledge expression" (Zhang, Ding, & Milojevic, 2013). But this definition is limited to a great extent to the normative theories where citations are considered based merely on topical and intellectual grounds. It is obvious that other motivations and incentives may come into play.

The motivations of authors seeking frequent citations are diverse. Individual incentives are essentially aligned with reputation and financial issues. Those researchers who shop for citations may easily make missteps while searching for literature or referencing to what would be advantageous. In addition, they tend to sacrifice social value, preferring research that would be cited more frequently (Olszewski, 2020).

To improve the quality of citations, researchers should increase their awareness of citation patterns. In linguistics, citation patterns are studied on their own by their rhetorical contexts. The analysis covers "densities, surface forms, roles of cited authors, reporting verbs, and functions" (Zhang, 2022).

Bias in Literature Practices

Avoiding bias in science is one of the strategic aims. Bias at any stage of research threatens to distort knowledge and impair the objectivity of research. Biases emerge at various stages of the research process, including citations. But bias is not always a measurable concept. Moreover, biases in citations may be influenced by prejudices in other aspects of research. Citing publications selectively may drive knowledge development "subtly into a certain direction" (De Vries, 2018).

What constitutes a citation bias? What skewed citation distributions prevail in research? As citations serve as a confirmation of contribution to science by the researchers' community, a citation bias is considered as a confirmation bias. Such a bias "connotes the seeking or interpreting of evidence in ways that are partial to existing beliefs, expectations, or a hypothesis in hand" (Nickerson, 1998: 175). Citation distributions may be skewed in various aspects (language, gender, nationality, schools of thought, journal-related citations, etc.). Though, one bias persists in all fields of knowledge. Most researchers prefer to cite sources in their native language (Bookstein, & Yitzhaki, 1999). This bias is more evident and far from being subtle as other biases tend to be.

There is also evidence that many authors select and cite sources and documents, not judging by their content. They use references to prove their ideas by citing reputed researchers in their field (Tahamtan, & Bornmann, 2018). This motivation may add to a bias.

Some time ago, gender imbalances in neuroscience reference lists made several researchers study the situation (Dworkin et al., 2020). They found that there was a gender bias as the imbalance in reference lists was "statistically unexpected" whereas "gender was not a factor" (Zurn, Bassett, & Rust, 2020). To mitigate the bias, the authors put up a special statement to be incorporated in research texts. The Citation Diversity Statement is aimed at increasing awareness of possible citation bias (Zurn, Bassett, & Rust, 2020). This practice is not common so far and not easy to follow.

Values and mindsets are not uniform and far from similar across the world. They cannot be forced by any researchers' communities upon other groups of researchers as science is undoubtedly a domain of civil freedoms. In some parts of the world, bias is approached differently, with a citation diversity statement put forward to mitigate alleged biases in citations of some social or other groups of researchers. Though, in other countries the only criterion of bias is related to the ignored quality of research and scope of the field. In those countries, personalities and social features of authors cited elsewhere are considered regardless of science and citations.

## Some Theory on Citation Networks: Triangular Citations

Following the science citation indices introduced in the 1960s, the citation analysis field was beginning to evolve. The latter entails analyses of the key citation relationships – direct citations, co-citation, and bibliographic coupling (Liu, Yang, & Chen, 2021). Such relationships on bigger databases lead to citation networks and citation cascades.

The more citations several publications share, the closer and the more similar the underlying studies are. So called "triangular citations" are based on triangular of references, also known as "triangular of meaning". Originally, it is a model explaining how linguistic symbols relate to the objects they represent. The model of 1923 by C.K. Odgen and I.A. Richards. It essentially reminds of the concepts previously offered by B. Bolzano (1810) and Aristotle (4th century B.C.). The relationships in the citation-applied model are shown in Diagrams 1 and 2.

Citation networks describe the relationships among some group of the documents or a database. The triangular model explains the levels of relationships and their interaction. Citation networks, or citation graphs are widely used in citation analysis. Whereas citation cascade is "the constitution
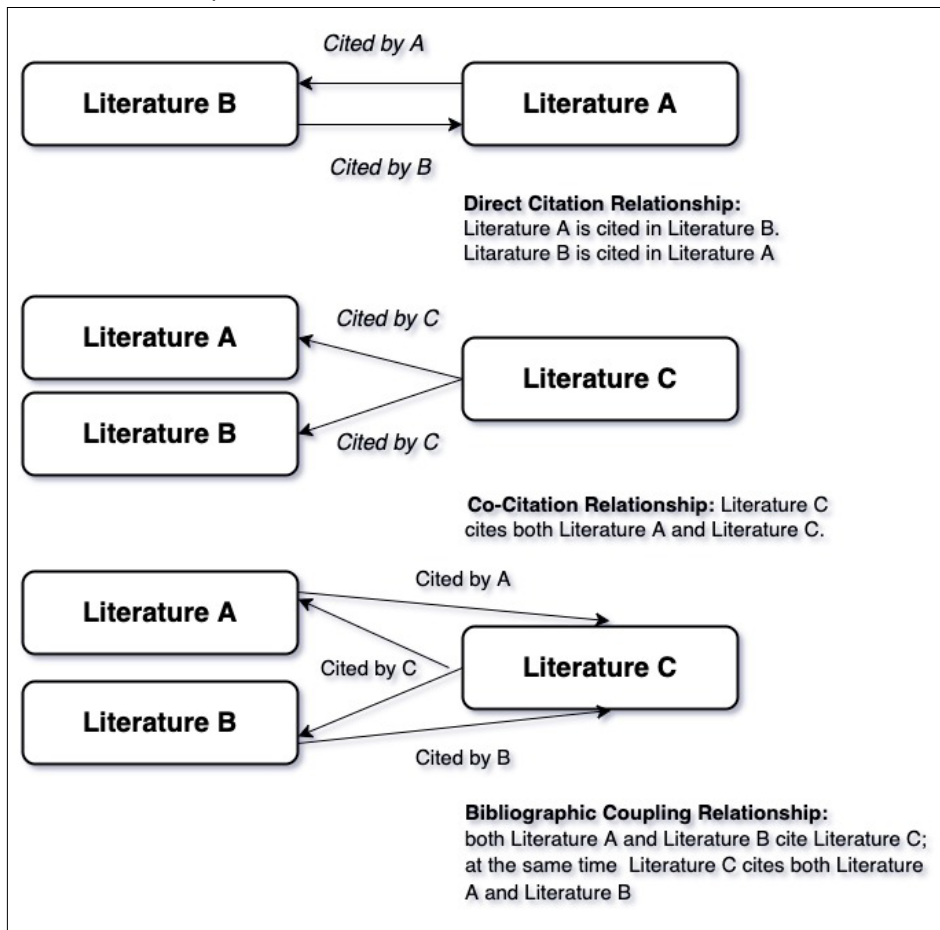
Diagram 1
Citation Triangular
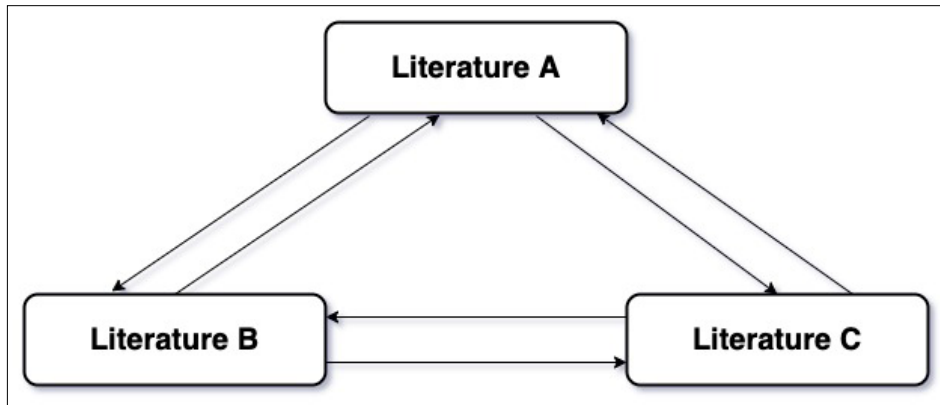
Diagram 2
Citation Triangular: Citation Relationships

of a series of subsequent citing events initiated by a certain publication" (Min et al., 2020).

Researchers of citations outline the core elements in the process of citing publications. Based on empirical studies, they include the context of the cited document, processes from selection to citation of documents, and the context of the citing document (Tahamtan, & Bornmann, 2018)

Conclusions and Applications for JLE Authors

The JLE as a scholarly peer-reviewed journal is making its utmost to overcome or avoid any biases in citations and any other aspects of scholarly communication. The JLE keeps their recurrent and future authors abreast of any practices that may improve their submissions to the JLE. Based on the above, we would invite our authors to focus more of their

efforts on the objective and unbiased selection of sources to cite. Though it may be a challenge to overcome a bias produced by the language repertoire of a researcher, the cited literature in the reference lists must represent the scope of the field to its advantage.

We realise that some issues are studied locally or regionally. If it is the case, all efforts ought to be made to find out whether there are any international or foreign publications associated this such local or reginal cases. Our reviewers tend to take a responsible attitude to the reference lists of all submissions to the JLE. Part of submissions are desk-rejected merely on the ground of incomplete or insufficient lists. It always implies a serious bias in citations.

The JLE expects that its future submissions would include citations of not only the prominent studies previously published and acknowledged by the scholarly community, but the cutting-edge research containing brand-new ideas, even still disputable. The JLE as any journal is aimed at producing a heated scientific discussion of new concepts.

In conclusion, the JLE welcome submissions on the raised issues, especially the linguistic patterns of citations and bias in citations. Further research may add a lot to fill the gaps that still exist in this field.

DECLARATION OF COMPETING INTEREST

None declared.

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